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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.                       | CONFIRMATION NO. |
|---|-------------|----------------------|---|------------------|
| 10/809,794  | 03/26/2004  | Takayuki Kobayashi   | 071469-0103                               | 7137             |
| 22428 7590 04/28/2008<br>FOLEY AND LARDNER LLP<br>SUITE 500<br>3000 K STREET NW<br>WASHINGTON, DC 20007 |             |                      | EXAMINER<br>WOLLSCHLAGER, JEFFREY MICHAEL |                  |
|   |             |                      | ART UNIT                                  | PAPER NUMBER     |
|   |             |                      | 1791                                      |                  |
|   |             |                      | MAIL DATE                                 | DELIVERY MODE    |
|   |             |                      | 04/28/2008                                | PAPER            |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/809,794

**Applicant(s)**

KOBAYASHI, TAKAYUKI

**Examiner**

Jeff Wollschlaeger

**Art Unit**

1791

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 8-11 and 13-20 is/are pending in the application.
- 4a) Of the above claim(s) 13-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8-11 and 18-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 13, 2008 has been entered.

### ***Response to Amendment***

Applicant's amendment to the claims filed January 16, 2008 has been entered. Claims 8, 18 and 20 are currently amended. Claims 13-17 remain withdrawn from further consideration. Claims 1-7 and 12 have been canceled. Claims 8-11 and 18-20 are under examination.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8-11 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koganezawa et al. (US 5,489,409) in view of Cornils et al. (US 5,108,526).

Regarding claims 8 and 18: Koganezawa et al. teaches a method of extrusion, comprising: a molding system including a die having an opening with both variable and invariable portions (Fig. 6-17); a gear pump (9:14-25); and conducting first and second control sequences

to control the shape of the variable die portion and adjusting the gear pump in synchronism with the change in shape (Fig. 1 and 8:30-9:25). Intrinsically, for operability of the gear pump, the gear pump is located between the die and an extruder. Koganezawa et al. do not teach the claimed passage configuration or opening and closing a valve mechanism arranged in the second passage.

However Cornils et al. teach a method and apparatus for controlling the flow rate of a profile extrusion wherein first and second passages are employed and the second passage contains a valve mechanism that is opened and closed within the width of the passage to control the amount of material to be supplied (Abstract; Figures 1 and 4; col. 2, lines 40-68; col. 3, lines 26-47; col. 4, lines 33-53; col. 6, lines 12-34).

Therefore it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to have modified the teaching of Koganezawa et al. and to have employed a first and second passage configuration with a valve in the second passage and to have opened and closed the valve within the width of the passage to control the amount of material to be supplied as suggested by Cornils, for the purpose, as suggested by Cornils, of effectively producing a desired profile shape along all portions of a variety of profiled articles (Cornils: col. 2, lines 40-67).

Regarding claim 9: Koganezawa et al. teaches changing the extruder/screw speed (6:50-55).

Regarding claim 10: It is intrinsic of Koganezawa et al. that the lag time of the extruder speed and flow would be accounted for during the control sequence in order for the process of Koganezawa et al. to function as desired (ie. increased accuracy of product shape).

Regarding claim 11: Koganezawa et al. teaches use of a pressure sensor as part of the control system (9:20-25).

As to claims 19 and 20, Koganezawa et al. disclose thermoplastic elastomeric materials such as styrene and butadiene copolymers (col. 10, lines 15-34).

### ***Response to Arguments***

Applicant's arguments filed January 16, 2008 have been fully considered, but are moot in view of the new grounds of rejection necessitated by the amendment to the claims. Applicant's amendment has overcome the 35 U.S.C. 112 paragraph rejections.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Wolschlagler whose telephone number is (571)272-8937. The examiner can normally be reached on Monday - Thursday 6:45 - 4:15, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on 571-272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Art Unit: 1791

/J. W./

Examiner, Art Unit 1791

April 28, 2008

/Monica A Huson/

Primary Examiner, Art Unit 1791